Keratherm® - Thermal Grease

KP 96, KP 97, KP 98, KP 12 (silicone free)

Applications:

- Notebooks
- Desktop CPU´s
- IGBT Units

Technical data for KP 77, KP 92 on request!

Properties	Unit	KP 96	KP 97	KP 98	KP 12 silicone free
Colour		dark white	white	grey	silver
Copound		soft / pasty			
Thermal properties					
Thermal resistance R_{th}	K/W	0.038	0.012	0.01	0.006
Thermal impedance	°Cmm²/W KIN²/W	11 0.017	4,5 0.007	4,1 0.0064	2,2 0.0033
Thermal conductivity λ	W/mK	2.4	5.0	6.0	10.0
Elektrical properties					
Dielectric breakdown $E_{d;\,ac}$	kV/mm	conductive			
Mechanical properties					
Measured thickness (+/-10%)	mm	0.035	0.025	0.025	0.025
Viscosity	Pas	25 - 35	90 - 120	110 - 130	60 - 90
Density	g/cm³	2.6	2.1	2.2	1.4
Application temperature	°C	-60 to +150		-60 to +150	
TML	Ma.%	< 1.4	< 1.3	< 1.5	< 0.1
Long term stability (1000h / 85°C / 85% relative humidity)					
Thermal resistance R_{th}	K/W	0.038	0.012	0.008	0.006

Keratherm® Thermal Greases are ceramic-filled single-component silicones with a high thermal conductivity. The non-crosslinked thermal compounds do not dry out. The silicone components do not leak out of the compound. The silicone-free thermal compound KP 12 consists of synthetic, thermal polymer and is suitable for a fast and effective heat dissipation. The paste is particularly suitable for silicone sensitive applications. The KP´s long-term stability guarantees a full operability during the entire life time of the product. Under normal application conditions Keratherm® Thermal Grease does not cure, dry out or melt. Special storage of Keratherm "Thermal Grease" is not required, therefore they can be stored under normal climate conditions for up to 12 months. If any separation of the filler materials becomes evident, the KP´s must be mixed thoroughly before use.

Comparison of the thermal resistance in relation with the contact pressure